

**REMARKS**

This Application has been carefully reviewed in light of the Office Action mailed April 7, 2006 ("Office Action"). To clarify various aspects of the inventive subject matter, Applicant has amended Claims 58, 61, 62, 84, 86, 88, 90, and 91. To advance prosecution of this application, Applicant has responded to each notation by the Examiner. Applicant submits that all of the pending claims are allowable over the cited references. Applicant respectfully requests reconsideration, further examination, and favorable action in this case.

**Claim Rejections under 35 U.S.C. § 112**

The Examiner continued to reject Claims 58-62 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant notes that the essential inquiry pertaining to the definiteness requirement is whether the claims set out and circumscribe subject matter with a reasonable degree of clarity and particularity. Definiteness of claim language must be analyzed, not in a vacuum, but in light of: (a) the content of the particular application disclosure; (b) the teachings of the prior art; and (c) the claim interpretation that would be given by one possessing ordinary skill in the art at the time the invention was made. M.P.E.P. § 2173.02. Furthermore, the test for indefiniteness under Section 112, second paragraph, is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." M.P.E.P. §2173.02 (citing *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986)). Applicant respectfully submits that the meaning of Claims 58-62 would be clear to one of ordinary skill in the art at the time of invention such that these claims comply with 35 U.S.C. § 112, second paragraph. Applicant discusses Claim 58 as an example. The relevant portion of Claim 58 recites "communicating from the star switching fabric a plurality of substantially similar sets of the optical signals . . . ."

The M.P.E.P. and the courts clearly condone the use of the term "substantially" in claims. See M.P.E.P. § 2173.05(b).D citing *Andrew Corp. v. Gabriel Electronics*, 847 F.2d 819, 6 U.S.P.Q.2d 2010 (Fed. Cir. 1988). Moreover, Applicant respectfully submits that the meaning and scope of Claim 58 would be clear to one of ordinary skill in the art at the time of

invention, whether the claim is read alone or in combination with the Specification. For example, Applicant respectfully directs the Examiner attention to at least Page 13, Line 7 through Page 14, Line 2; Page 30, Lines 27-32; Page 66, Lines 7-21; and Page 67, Lines 9-16, which provide example descriptions corresponding to these claims. Claim 58 and its dependent claims, are therefore definite. For substantially analogous reasons, Claims 60-62 are also definite.

Thus, Applicant believes the scope of Claims 58-62 is reasonably ascertainable by those skilled in the art and thus the claims are not indefinite. *See* M.P.E.P. § 2173.05(e) (citing *Ex parte Porter*, 25 USPQ2d 1144, 1145 (Bd. Pat. App. & Inter. 1992)). However, without conceding the veracity of the Examiner's rejection under 35 U.S.C. § 112, and solely for the purpose of advancing prosecution in this case, Applicant has amended Claims 58, 61, and 62. Applicant believes these amendments do not narrow the scope of the claims, but address the Examiner's rejections under §112. Applicant respectfully requests reconsideration and favorable action in this case.

#### **The Non-Statutory Double Patenting Rejection**

The Examiner has rejected Claims 58-66, and 68-91 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-73 of U.S. Patent No. 6,943,925 B1 issued to Islam ("*Islam*") since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.. The Examiner provides that a timely filed terminal disclaimer in compliance with 37 C.F.R. 1.321(c) may be used to overcome an actual or provisional rejection. Without conceding the veracity of the Examiner's rejection under the judicially created doctrine of obviousness-type double patenting, and solely for the purpose of advancing prosecution in this case, Applicant will consider filing a terminal disclaimer upon receiving confirmation that the pending claims are otherwise in condition for allowance.

#### **Claim Rejections under 35 U.S.C. § 102**

The Examiner rejected Claims 58-66, 68, 70-78, and 80-91 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Serial No. 5, 739,935 issued to Sabella et al. ("*Sabella*"). Applicant respectfully traverses these rejections for the reasons discussed below.

Applicant provides a reminder that “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q. 2d 1051, 1053 (Fed. Cir. 1987); M.P.E.P. § 2131. In addition, “[t]he elements *must* be arranged as required by the claim.” *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989); *In re Bond*, 15 U.S.P.Q. 2d 1566 (Fed. Cir. 1990); M.P.E.P. § 2131 (emphasis added).

**A. Sabella Does Not Anticipate Each and Every Limitation Recited in Claims 58 and 62**

Applicant submits that Claim 58 is patentable over *Sabella*. Among other features, Claim 58 recites, in part, “processing one of the optical signals received having primarily a first wavelength using a first tunable filter of the plurality of tunable filters tuned to the first wavelength.” In addition, Claim 58 recites, in part, “tuning a second tunable filter of the plurality of tunable filters to a second wavelength while the first tunable filter processes the optical signal having primarily the first wavelength.”

*Sabella* fails to teach or suggest a number of elements of Claim 58. For example, nowhere does *Sabella* contemplate tuning a second tunable filter of the plurality of tunable filters to a second wavelength while the first tunable filter processes the optical signal having primarily the first wavelength. The Examiner cites the following paragraph for the proposition that *Sabella* discloses tuning a second tunable filter to a second wavelength while the first tunable filter processes the optical signal having primarily the first wavelength:

The pairs of tuning filters 62a-62f and wavelength converters 64a-64f already described above with respect to FIG. 4 perform routing of different channels to the output fibers and wavelength switching in the wavelength domain, respectively. The wavelength converters 64a-64f may, if desired, translate the f2 and f3 channels as well as the f4 and f5 channels back to the corresponding f0 and f1 frequencies(wavelengths) which were received by wavelength converters 70. This feature permits the node wavelength switching function to remain transparent outside the node. Similarly, the outputs from pairs of wavelength converters are combined in respective combiners to reconstitute the WDM channels on each link.

*See Office Action at 5.* Applicants respectfully disagree. Neither this paragraph nor any other portion of *Sabella* discloses, teaches or suggests tuning a second tunable filter of the

plurality of tunable filters to a second wavelength while the first tunable filter processes the optical signal having primarily the first wavelength. Consequently, *Sabella* fails to teach or suggest at least “tuning a second tunable filter of the plurality of tunable filters to a second wavelength while the first tunable filter processes the optical signal having primarily the first wavelength.”

Applicant submits that independent Claim 58 is patentable over *Sabella* for at least the reasons discussed above. Thus, Applicant respectfully requests withdrawal of the rejection and full allowance of Claim 58 and all claims depending therefrom.

Applicant submits that independent Claim 62 is patentable over *Sabella* for at least reasons analogous to those discussed above. Thus, Applicant respectfully requests withdrawal of the rejection and full allowance of Claim 62 and all claims depending therefrom.

**B. *Sabella* Does Not Anticipate Each and Every Limitation Recited in Claims 65 and 83**

Applicant submits that Claim 65 is patentable over *Sabella*. Among other features, Claim 65 recites, in part, “receiving at a first line card a first optical packet comprising a payload and having a first duration.” In addition, Claim 65 recites, in part, “generating, based on the first packet, an optical router packet comprising the payload and having a second duration shorter than the first duration, the optical router packet having a first wavelength.”

*Sabella* fails to teach or suggest a number of elements of Claim 65. For example, nowhere does *Sabella* contemplate generating, based on a first packet received at a first line card, an optical router packet comprising the payload of the first packet and ***having a second duration that is shorter than the first duration*** of the first packet. In fact, none of the cited portions of *Sabella* even mention that any of its optical packets can have differing durations. Moreover, none of the cited portions of *Sabella* even teach or suggest an optical router packet that has a ***duration shorter than*** a duration of an optical packet received by the router. Consequently, *Sabella* fails to teach or suggest “receiving at a first line card a first optical packet comprising a payload and having a first duration” and “generating, based on the first

packet, an optical router packet comprising the payload and having a second duration shorter than the first duration, the optical router packet having a first wavelength.”

Applicant submits that independent Claim 65 is patentable over *Sabella* for at least the reasons discussed above. Thus, Applicant respectfully requests withdrawal of the rejection and full allowance of Claim 65 and all claims depending therefrom.

Applicant submits that independent Claim 83 is patentable over *Sabella* for at least reasons analogous to those discussed above. Thus, Applicant respectfully requests withdrawal of the rejection and full allowance of Claim 83 and all claims depending therefrom.

**C. *Sabella* Does Not Anticipate Each and Every Limitation Recited in Claims 68 and 71**

Applicant submits that Claim 68 is patentable over *Sabella*. Among other features, Claim 68 recites, in part, “receiving at a first line card a plurality of optical packets each comprising a payload and a first identifier of a common destination element.” In addition, Claim 68 recites, in part, “generating at the first line card an aggregated frame by encapsulating the plurality of optical packets with a second identifier of the common destination element, the aggregated frame comprising at least the payloads of each of the plurality of optical packets having the first identifier of the common destination element.”

*Sabella* fails to teach or suggest a number of elements of Claim 68. For example, nowhere does *Sabella* contemplate receiving at a first line card a plurality of optical packets each comprising a payload and a first identifier of a common destination element and generating at the first line card an aggregated frame ***by encapsulating the plurality of optical packets with a second identifier of the common destination element***, the aggregated frame comprising at least the payloads of each of the plurality of optical packets having the first identifier of the common destination element. In fact, none of the cited portions of *Sabella* even mention, much less teach or suggest, encapsulating a plurality of optical packets received by a line card. Consequently, *Sabella* fails to teach or suggest “receiving at a first line card a plurality of optical packets each comprising a payload and a first identifier of a common destination element” and “generating at the first line card an aggregated frame by

encapsulating the plurality of optical packets with a second identifier of the common destination element, the aggregated frame comprising at least the payloads of each of the plurality of optical packets having the first identifier of the common destination element.”

Applicant submits that independent Claim 68 is patentable over *Sabella* for at least the reasons discussed above. Thus, Applicant respectfully requests withdrawal of the rejection and full allowance of Claim 68 and all claims depending therefrom.

Applicant submits that independent Claim 71 is patentable over *Sabella* for at least reasons analogous to those discussed above. Thus, Applicant respectfully requests withdrawal of the rejection and full allowance of Claim 71 and all claims depending therefrom.

#### **Claim Rejections under 35 U.S.C. § 103**

The Examiner rejected Claims 69 and 79 under 35 U.S.C. § 103(a) as being unpatentable over *Sabella* in view of U.S. Patent Serial No. 6,417,944 B1 issued to Lahat et al. (“*Lahat*”). Applicant respectfully traverses these rejections for the reasons discussed below.

#### **A. The Proposed Combinations Fail to Disclose, Teach, or Suggest Each and Every Limitation Recited in the Independent and Dependent Claims**

Applicant provides a reminder that to defeat a patent under 35 U.S.C. § 103, “the prior art references must teach, disclose, or suggest all the claim limitations.” *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991); M.P.E.P. § 706.02(j). Applicant respectfully submits that none of the cited references, taken alone or in combination, teach or suggest, either expressly or inherently, a number of elements of the independent or dependent Claims.

Dependent Claims 69 and 79 depend from independent Claims 68 and 71, which Applicant has shown above to be clearly allowable over *Sabella*. *Lahat* fails to atone of the deficiencies of *Sabella*. Thus, dependent Claims 69 and 79 are allowable at least because of they depend from allowable independent claims. To avoid burdening the record and in view of the clear allowability of independent Claims 58, 62, 65, 68, 71, and 83, Applicant does not specifically discuss these distinctions in this Response. However, Applicant reserves the right to discuss these distinctions in a future Response or on Appeal, if appropriate.

Additionally, Applicant does not admit that the proposed *Sabella-Lahat* combination is even possible or that the Examiner has shown the requisite teaching, suggestion, or motivation in the cited references or in the knowledge generally available to one of ordinary skill in the art at the time of invention to combine or modify these references in the manner the Examiner proposes.

## **B. The Proposed Combinations is Improper**

The rejection of Applicants' claims is also improper because the Examiner has not shown the required teaching, suggestion, or motivation in *Sabella*, *Lahat*, or in the knowledge generally available to those of ordinary skill in the art at the time of the invention to combine or modify the *Sabella*, *Lahat*, and/or with information known by the Examiner in the manner the Examiner proposes. The rejected claims are allowable for at least this additional reason.

### **1. The Obviousness Standard**

The question raised under 35 U.S.C. § 103 is whether the prior art taken as a whole would suggest the claimed invention taken as a whole to one of ordinary skill in the art at the time of the invention. Accordingly, even if all elements of a claim are disclosed in various prior art references, which is certainly not the case here as discussed above, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill at the time of the invention would have been prompted to modify the teachings of a reference or combine the teachings of multiple references to arrive at the claimed invention. It is clear based at least on the many distinctions discussed above that the proposed *Sabella* and/or *Lahat* combination does not, taken as a whole, suggest the claimed invention, taken as a whole. Respectfully, it appears to Applicant that the Examiner has merely pieced together disjointed portions of references, with the benefit of hindsight using Applicant's claims as a blueprint, in an attempt to reconstruct Applicant's claims.

The governing Federal Circuit case law makes this strict legal standard clear.<sup>1</sup> According to the Federal Circuit, "a showing of a suggestion, teaching, or motivation to combine or modify prior art references is an essential component of an obviousness holding." *In re Sang-Su Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 2002) (quoting

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<sup>1</sup> Note M.P.E.P. 2145 X.C. ("The Federal Circuit has produced a number of decisions overturning obviousness rejections due to a lack of suggestion in the prior art of the desirability of combining references.").

*Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 U.S.P.Q.2d 1456, 1459 (Fed. Cir. 2000)). “Evidence of a suggestion, teaching, or motivation . . . may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved.” *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). However, the “range of sources available . . . does not diminish the requirement for actual evidence.” *Id.* ***Although a prior art device “may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.”*** *In re Mills*, 916 F.2d at 682, 16 U.S.P.Q.2d at 1432 (emphasis added). *See also In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998) (***holding a prima facie case of obviousness not made where the combination of the references taught every element of the claimed invention but did not provide a motivation to combine***); *In Re Jones*, 958 F.2d 347, 351, 21 U.S.P.Q.2d 1941, 1944 (Fed. Cir. 1992) (“Conspicuously missing from this record is any evidence, other than the PTO’s speculation (if that can be called evidence) that one of ordinary skill in the herbicidal art would have been motivated to make the modification of the prior art salts necessary to arrive at” the claimed invention.). Even a determination that it would have been obvious to one of ordinary skill in the art at the time of the invention to try the proposed modification or combination is not sufficient to establish a *prima facie* case of obviousness. *See In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988).

In addition, the M.P.E.P. and the Federal Circuit repeatedly warn against using an applicant's disclosure as a blueprint to reconstruct the claimed invention. For example, the M.P.E.P. states, ***“The tendency to resort to ‘hindsight’ based upon applicant’s disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.”*** M.P.E.P. § 2142 (emphasis added). The governing Federal Circuit cases are equally clear. “A critical step in analyzing the patentability of claims pursuant to [35 U.S.C. § 103] is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. . . . Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one ‘to fall victim to the insidious effect of a hindsight syndrome *wherein that which only the invention taught is used against its teacher.*’” *In re*



*Kotzab*, 217 F.3d 1365, 1369, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000) (citations omitted; emphasis added). In *In re Kotzab*, the court noted that to prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness. *See id.* *See also, e.g., Grain Processing Corp. v. American Maize-Products*, 840 F.2d 902, 907, 5 U.S.P.Q.2d 1788, 1792 (Fed. Cir. 1988). Similarly, in *In re Dembiczak*, the Federal Circuit reversed a finding of obviousness by the Board, ***explaining that the required evidence of such a teaching, suggestion, or motivation is essential to avoid impermissible hindsight reconstruction of an applicant's invention:***

Our case law makes clear that the best defense against the subtle but powerful attraction of hind-sight obviousness analysis is ***rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.*** Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.

175 F.3d at 999, 50 U.S.P.Q.2d at 1617 (emphasis added) (citations omitted; emphasis added).

## 2. Argument

According to the Examiner, it would have been obvious to a person of skill in the art at the time the invention was made to combine the teachings of *Sabella* with *Lahat* because *Lahat's* purported teaching of a destination ATM address. *See e.g., Office Action at 9.* For example, the Examiner provides “it would have been obvious to an ordinary skill in the art at the time when the invention was made to incorporate the destination identifier or address as taught by *Lahat* into the *Sabella's* apparatus in order to utilize the switching devices. Doing so would provide a satisfy demand for increasing levels bandwidth by using the ATM switches in the optic network.” *Id.*

The Examiner provides no support in either the *Sabella* reference, in knowledge that is supposedly generally available to those of ordinary skill in the art at the time of the invention, or in *Lahat* for this assertion. *Id.* Applicant respectfully submits that the Examiner's assertion that it would have been obvious to modify the teachings of *Sabella* with *Lahat* to purportedly arrive at Applicant's invention is entirely insufficient to support a *prima*

*facie* case of obviousness under 35 U.S.C. § 103(a) under the M.P.E.P. and the governing Federal Circuit case law. Consequently, the Examiner has not demonstrated the requisite teaching, suggestion, or motivation in either of the *Sabella* reference or in the knowledge that is supposedly generally available to one of ordinary skill in the art, or with *Lahat* at the time of Applicant's invention to combine or modify these references in the manner the Examiner proposes.

It appears that the Examiner is merely proposing alleged advantages of modifying *Sabella* with the teachings of *Lahat* (advantages which Applicant does not admit could even be achieved by combining these references in the manner the Examiner proposes). While the Examiner has cited portions of *Sabella* and *Lahat* the Examiner has not pointed to any portions of the cited references or to knowledge supposedly generally available to those of ordinary skill in the art at the time of the invention that would teach, suggest, or motivate one of ordinary skill in the art at the time of invention to modify the system disclosed in *Sabella* as suggested by the Examiner. In other words, the alleged advantage of the system described by the Examiner does not provide an explanation as to: (1) why it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention (***without using Applicants' claims as a guide***) to modify the particular techniques disclosed in *Sabella* as suggested by the Examiner; (2) how one of ordinary skill in the art at the time of Applicants' invention would have actually done so; and (3) how doing so would purportedly meet the limitations of the claims. Indeed, if it were sufficient for Examiners to merely point to a purported advantage and conclude that it would have been obvious to combine or modify that reference with other references simply based on that advantage (which, as should be evident from the case law discussed above, it certainly is not), then virtually any two references would be combinable just based on the fact the one reference states an advantage of its system. Of course, as the Federal Circuit has made clear and as discussed above, that is not the law.

It certainly would not have been obvious to one of ordinary skill in the art at the time of invention ***to even attempt*** to, let alone ***to actually***, modify or combine the system disclosed in *Sabella* with the teachings of *Lahat* in the manner proposed by the Examiner.<sup>2</sup> Applicant

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<sup>2</sup> If "common knowledge" or "well known" art is relied upon by the Examiner to combine or modify the references, Applicant respectfully requests that the Examiner provide a reference pursuant to M.P.E.P. §

respectfully submits that the Examiner's attempt to modify or combine *Sabella* with the teachings of *Lahat* appears to constitute the type of impermissible hindsight reconstruction of Applicant's claims, using Applicant's claims as a blueprint, that is specifically prohibited by the M.P.E.P. and governing Federal Circuit cases.

Accordingly, since the prior art fails to provide the required teaching, suggestion, or motivation to modify *Sabella* in the manner the Examiner proposes, Applicant respectfully submits that the Examiner's conclusions set forth in the Office Action do not meet the requirements set forth in the M.P.E.P. and the governing Federal Circuit case law for demonstrating a *prima facie* case of obviousness. Applicant respectfully submits that the rejection must therefore be withdrawn.

Consequently, a *prima facie* case of obviousness cannot be maintained with respect to dependents Claims 69 and 79, as the Examiner has not show the requisite proof necessary to establish a suggestion or motivation to combine the cited references.

### **C. Conclusion**

For at least these reasons, Applicant respectfully requests reconsideration and allowance of independent Claims 58, 62, 65, 68, 71, and 83, and their dependent claims.

### **No Waiver**

All of Applicant's arguments and amendments are without prejudice or disclaimer. Additionally, Applicant has merely discussed example distinctions from the *Sabella* and *Lahat* references. Other distinctions may exist, and Applicant reserves the right to discuss these additional distinctions in a later Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicant does not acquiesce to the Examiner's additional statements. The example distinctions discussed by Applicant are sufficient to overcome the anticipation and obviousness rejections.

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2144.03 to support such an argument. If the Examiner relies on personal knowledge to supply the required motivation or suggestion to combine or modify the references, Applicant respectfully requests that the Examiner provide an affidavit supporting such facts pursuant to M.P.E.P. § 2144.03.

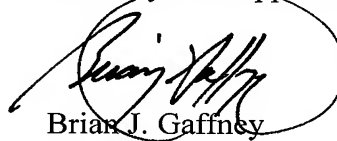
**CONCLUSION**

Applicant has made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicant respectfully request reconsideration and full allowance of all pending Claims.

Applicant believes that no fees are due. However, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

If the Examiner feels that a conference would advance prosecution of this Application in any manner, Brian J. Gaffney stands willing to conduct such a telephone interview at the convenience of the Examiner. Mr. Gaffney may be reached at (214) 953-6682.

Respectfully submitted,  
BAKER BOTTS L.L.P.  
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